

Survey Methods

The list sampling frame maintained by the Michigan Agricultural Statistics Service was the primary source of names of commercial fruit farms. Commercial meant any operation with at least one acre of any of the eleven fruits on the inventory. (The exception was brambles, for which one-tenth acre sufficed.) Data for all fruit was collected for every qualifying operation.

Questionnaires and cover letters were mailed to fruit farms on the list frame October 24, 1994. Large farms were sent only a cover letter informing operators that a NASDA data collector would contact them to collect the requested data. Growers who responded to the 1991 Fruit Survey were given a printout of their responses to that inventory. Data collection continued until the spring of 1995.

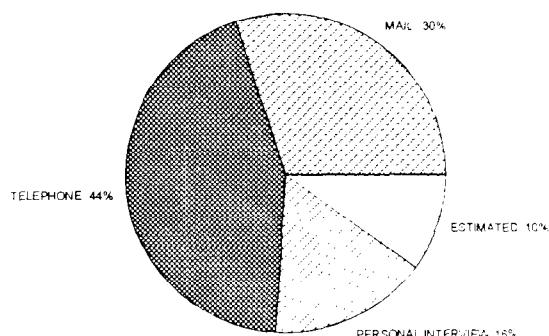
The apple section of the survey instrument is shown at the end of this section. Farmers were asked to complete, by block (vineyard or plantation), the block name or number, the county, township and section where that block was located, variety, rootstock or trellis, year of planting, trees, acres and spacing for each variety in the block. Each line within a block represents a different variety, rootstock, year of planting or plant spacing.

These detailed data were obtained for 90 percent of the farms. There were 30 percent returned by mail, 44 percent completed by telephone and 16 percent done by personal interview. Nine percent refused to do the inventory and one percent were unable to be contacted. Estimates of total acres of each fruit were made from various sources for the farms for which detailed block records were not available.

The completion rates of the detailed data varied by region and by fruit type. They were calculated by dividing the total acres with complete block data by those acres summed with estimated acres for refusals and inaccessible. These rates are shown as percentages in the accompanying table.

Inverses of those completion rates were used to expand detailed data to total acreage totals by fruit and district. The higher the completion rate for a district and fruit, the more accurate are the detailed data shown in the two-way and three-way tables of this bulletin.

DATA COLLECTION METHODS
PERCENTS



Percent of Acreage Completed by District and Fruit

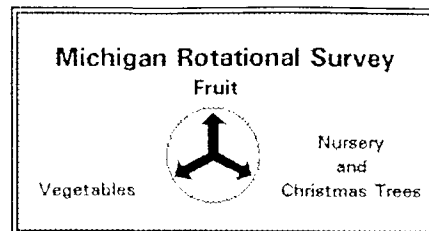
District	Apples	Apri-cots	Blue-berries	Bram-bles	Cherries, sweet	Cherries, tart	Grapes	Necta-rines	Peach-es	Pears	Plums	Total
Northwest	85.0	67.3	98.4	97.0	94.7	93.3	100.0	85.7	72.8	96.9	90.1	87.5
Oceana-Mason	71.4											70.2
Grand Rapids	89.6											90.7
West Central		53.5	92.7	82.9	82.9	84.5	98.1	91.9	67.1	91.8	70.1	
Southwest	87.1	98.1	94.2	68.8	94.9	97.1	93.3	79.9	88.6	89.8	94.3	89.3
North	79.1											84.1
Saginaw Bay	74.6											89.0
Central	73.8											76.2
West Thumb	84.4											83.6
East Thumb	72.6											73.8
South Central	67.0											69.8
Southeast	92.1											91.1
East		100.0	91.0	82.8	88.8	88.1	98.0	100.0	81.7	68.0	80.0	
State	85.6	75.0	93.6	78.2	93.1	91.0	93.5	82.6	79.9	89.1	84.1	86.1



Michigan
Agricultural
Statistics
Service

P.O. Box 20008
Lansing, Michigan 48901-0608
(517) 377-1834

Fruit Survey-1994



October 21, 1994

Dear Grower:

Michigan's fruit industry needs updated information for planning, marketing, and production forecasting. The last survey was conducted in 1991. Funds to conduct this project are provided by the Michigan Department of Agriculture. Response to this survey is voluntary and not required by law, however, your voluntary cooperation in reporting the acreage and number of trees you operated in 1994 is needed. A computer printout of your report will be returned to you for your records. Your report is strictly confidential. Thank you for your help.

Don J. Fedewa
State Statistician

Marty Saffell
Statistician

To avoid duplication, indicate below any farm name or partner(s) associated with this operation **not** included in the above address.

If not growing fruit,

check reason below and give new operator's name.

1. ☐ Farm sold.
2. ☐ Retired from farming.
3. ☐ Entire farm rented to others.
4. ☐ Farming, but not growing fruit.

Farm Name: _____

Partner's Name(s): _____

Address: _____

City: _____ Zip: _____

County of Operation: _____

New Operator Name: _____

Address: _____

City: _____ Zip: _____

Phone: _____

***** Please read instructions on back page before proceeding. *****

Report for all land you operate (Include land you rent from others, but exclude land you rent to others).

List the total acres in your operation, for each fruit grown.

Crop	Total Acreage
Apples	001
Tart Cherries	101
Sweet Cherries	151
Blueberries	201
Grapes	301
Peaches	401

Crop	Total Acreage
Plums	501
Pears	601
Brambles	701
Apricots	801
Nectarines	851
All Fruit	901

Apples

VARIETY	CODE	VARIETY	CODE	VARIETY	CODE	VARIETY	CODE	VARIETY	CODE
Cortland	011	Fuji	016	Jonagold	020	Mutsu	025	Spartan	031
Delicious, Golden	012	Gala	017	Jonamac	046	Northern Spy	026	Winesap	032
Delicious, Regular*	013	Granny Smith	018	Jonathan	022	Paulare	027	Other (specify)	
Delicious, Sport Red**	014	Idared	019	Jonathan, Sport	023	Rome	029		
Empire	015	Jerseymac	021	McIntosh	024	Rome, Sport	030		

*Regular Delicious (Code 013) includes all strains developed before Starkrimson.

* * Sport (Code 014) includes Starkrimson and all strains developed afterwards.

Common Rootstocks and Codes

ROOTSTOCK	CODE	ROOTSTOCK	CODE	ROOTSTOCK	CODE
Seedling	1	7 (VII)	4	9 (IX) & 9 clones	7
111	2	26	5	27	8
106	3	Mark	6	Interstem	9
Other (specify)					

[illegible]

Apples

[illegible]

INSTRUCTIONS

Please report only for acreage of fruit you operate, including land rented from others. **Do not include acreage rented to others.**

If you participated in the 1991 Fruit Survey, you may find enclosed a printout of the blocks you reported in 1991. Space has been left on these printouts for you to update the information. Check all "other" varieties on the block record and update them. Your updated copy of the 1991 printout should be returned with this questionnaire in which you should report on new blocks acquired or planted since 1991. If it is easier, you may use the printout as a reference only and list all of your blocks in this questionnaire. All of your fruit blocks must be accounted for between the updated printout and the questionnaire.

If you did not receive a printout from the 1991 survey, complete a line in the questionnaire for each block in your operation. Use the name or number that you use to identify each block. Each block should have its own distinctive name or number. List the county, township and section where the block is located. Include all bearing and non-bearing blocks. Exclude abandoned blocks.

Enter the appropriate variety and rootstock codes on the lines and complete the remaining cells for each variety in the block. Round acreage to the nearest tenth of an acre. To separate blocks, draw a line across the hash marks. **See examples in the Apples and Cherries section.** If you need space for additional blocks, continue on the extra page provided in the questionnaire.

It is important that we receive a response from all growers. If you are not able to complete and return the questionnaire by mail, a representative of our office will contact and assist you. If there are any questions or if you need assistance in completing this inquiry, call our office at (517) 377-1834.

To help insure complete coverage of this fruit inventory, please list the name and address of two fruit growers near you. All information will be kept confidential.

NAME

ADDRESS

PHONE

_____	_____	_____
_____	_____	_____

Are you involved in more than one fruit operation? NO _____ YES _____

If YES -- Please identify that operation NAME: _____

ADDRESS: _____

Your Name _____ Phone _____

For Office Use Only		Status Code				
Enumerator: _____		999	1 = Int	2 = Tel	3 = Mail	4 = Ref 5 = Inac